

**CYCLOSPORIN A TREATMENT OF PSORIASIS**

<b>PSI score</b>	<b>Patient #301</b>			<b>Patient #302</b>			<b>Patient #304</b>		
	<b>9</b>	<b>9</b>	<b>7</b>	<b>10</b>	<b>8</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>3</b>
Weeks	0	1	4	8	0	4	0	1	4
SCCA2	448	514	260	302	211	3	569	104	3
PI3	501	594	329	313	309	3	661	118	3
SCCA1	83	146	89	72	43	3	44	80	3
S100A9	482	565	318	296	381	14	646	284	3
SPRR2A	438	377	293	277	174	4	592	99	6
G1P2	15	11	18	18	88	4	106	21	3
GJB2	40	78	45	42	37	3	48	77	4
HAL	40	69	30	45	36	3	14	12	2
IF156	12	5	11	11	26	3	57	20	3
MX1	30	27	28	23	27	5	35	6	2
S100A12	25	25	8	13	10	2	122	23	7
TGM3	113	103	67	77	42	3	20	11	3
IFNRG7A	17	4	12	9	18	2	48	16	7
HPB17	37	24	27	26	45	6	365	5	5
S100A7	424	618	268	262	363	67	596	12	4
TGM1	85	60	43	49	44	3	56	10	3
ATP1A1	18	24	16	21	15	3	21	7	3
LKYHYD	16	21	14	11	8	3	56	30	6
SOLE	37	32	24	26	17	3	36	4	2
KCNC3	21	15	11	14	24	3	393	159	49
SPRR1B	295	410	223	203	234	20	356	45	2
LGALS3BP	35	39	26	21	24	6	39	26	3
PP13	18	14	11	12	5	2	22	7	3
CYBA	5	3	7	4	4	3	3	9	4
PRSS6	139	100	95	77	49	5	145	56	17
S100A2	350	308	226	229	300	69	477	96	26
PLSCR1	12	7	7	8	11	2	18	3	2
KRT17	395	338	227	189	249	14	356	45	2
ID1	96	120	94	46	58	29	82	63	26
CRABP2	161	125	133	109	150	20	221	55	15
FABP5	178	231	193	173	120	35	201	186	54
RB1	10	13	9	6	10	4	14	8	4
CSNK1A1	12	18	18	20	10	4	16	21	5
IL4R	29	22	19	16	13	3	35	5	4
STAT1	21	37	16	16	13	4	40	37	6
TOP1	23	30	13	13	7	3	30	20	4
NP	38	34	27	26	20	7	47	15	7
GNA15	39	28	26	23	17	4	36	21	3
PGD	14	10	6	8	4	2	9	4	2
RANBP1	30	21	21	21	18	4	46	12	6
K238_PERML1	5	9	10	4	7	3	9	6	3
UBE2F	12	4	8	6	7	2	18	4	3

**FIGURE 1**

BENE	34	37	20	18	10	5	34	11	5
IRAK1	42	36	42	26	25	9	50	40	10
TUBB2	111	111	103	93	37	15	98	112	34
ELP1	27	35	21	24	7	3	36	25	5
IFI27SEP	161	97	119	92	149	38	185	57	30
PCSK4	46	56	24	39	21	4	45	31	7
K11_NUK34	73	53	48	44	27	7	73	41	12
EIF5	21	17	11	11	5	2	21	9	4
TSSC3	28	13	11	17	20	4	29	8	4
LDLR	20	20	8	10	15	4	19	11	5
GOT2	33	26	20	22	18	5	30	16	6
GARS	43	49	45	42	26	11	39	62	15
PHB	17	14	14	14	10	2	13	3	2
EIF2B	46	40	40	35	22	8	35	22	8
RAB1	20	26	12	15	6	3	22	16	4
EFEL1.2	8	10	6	6	4	3	7	5	3
STAT3	33	28	19	23	14	5	36	8	3
PPP2CA	17	11	11	11	8	3	22	14	6
OIAS	28	26	26	21	14	7	15	16	10
UBECS	21	16	15	14	13	7	38	7	5
EIF2A	31	24	14	15	11	5	28	11	8
PSMB10	30	13	18	13	20	6	39	10	3
PRKMK3	19	12	11	8	5	4	18	8	6
GSTP1	314	229	220	199	191	52	480	79	25
S100A11	175	92	82	105	98	20	165	55	28
CSTB	169	239	130	151	105	11	285	68	19
ATOX1	55	39	38	37	24	10	55	31	11
CDC25	20	15	9	8	11	4	21	11	4
LADI	82	56	46	46	35	11	86	33	14
P55CDC	20	13	13	12	15	6	32	5	4
PRPHH	54	43	42	41	24	7	67	24	7
PGAM1	124	138	105	90	62	22	123	91	31
TB3_1	17	15	10	13	6	4	15	9	3
SCYA4	4	6	4	4	4	3	9	4	3
E_23773	13	12	8	8	8	3	13	9	3
MDF1	6	11	6	3	5	3	5	4	2
CASP	9	10	3	7	9	3	15	7	4
GPX3	38	30	29	20	25	6	43	14	5
EIF5A	3	4	3	4	8	3	4	3	2
CBR	15	36	7	17	16	8	21	9	13
COX5A	40	35	32	28	16	4	51	30	6
HSN	76	78	51	54	51	24	63	44	17
PSMHSC7	70	44	41	41	27	11	61	20	14
UQCRCFS1	45	46	33	36	23	8	43	47	15
MSE55	20	10	15	13	13	4	15	7	2
CYB561	5	5	3	4	4	2	6	4	3
CDKN3	7	8	5	7	6	3	17	3	3
CD48	6	4	4	4	7	3	4	5	3
SEC23B	13	6	8	7	4	2	18	3	3
MAGEP15	18	24	14	14	8	4	15	16	4
DLD	9	11	4	7	5	4	6	10	4

**FIGURE 1 CONT.**

P4HB	120	115	88	73	46	31	149	76	25
TP11	139	87	80	102	74	29	144	41	22
BTG3	21	27	22	19	14	6	19	20	10
ARF6	6	10	9	8	7	4	7	11	4
PYRIDK	10	2	4	4	4	2	13	2	2
ITBA2	16	10	14	8	8	3	23	10	4
CSNK1E	4	11	9	6	10	5	6	21	8
SDC4	24	15	16	15	16	18	22	13	17
TESK1	4	3	2	2	3	4	2	3	2
SPTAN1	9	4	6	4	4	4	4	5	6
METPEP	37	17	22	43	23	46	42	32	38
TMEM1	2	2	3	3	2	7	2	5	5
KRT2A	85	62	157	180	56	188	172	410	230
CRIP1	14	4	16	10	9	13	11	7	15
CST6	54	39	61	47	23	36	102	136	83
IGGFCBP	2	3	3	3	2	3	3	4	5

=genes that increase in gene expression greater than 2 fold when compared to uninvolved skin

=genes that decrease in gene expression greater than 2 fold when compared to uninvolved skin

FIGURE 1 CONT.

**RhIL-11 TREATMENT OF PSORIASIS**

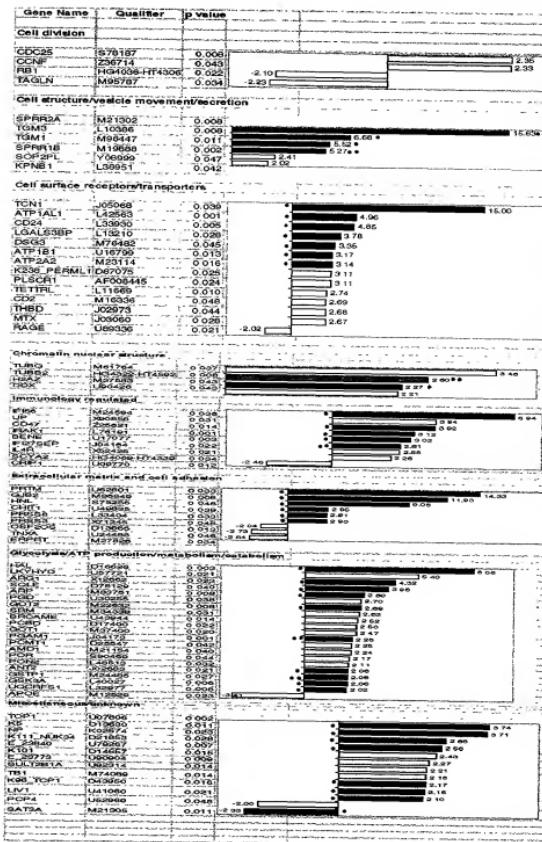
Weeks	Patient #202						Patient #203						Patient #208					
	11	11	9	9	9	9	10	10	7	4	4	4	7	6	6	5		
PSI score	0	1	4	8	12	0	1	4	8	12	0	1	4	8	12	0	1	4
Weeks	0	1	4	8	12	0	1	4	8	12	0	1	4	8	12	0	1	4
SCCA1	413	421	302	451	175	281	265	298	87	3	179	235	43	71	117	290	244	117
PD	407	633	523	567	299	47*	249	280	32	3	199	201	57	56	111	201	191	101
SCCA1	98	127	152	61	59	68	112	123	46	12	84	101	57	56	111	191	99	101
S100A9	514	589	474	623	501	404	348	466	392	12	455	345	261	206	194	191	99	101
SPRR2A	514	489	420	532	312	219	228	237	180	11	194	191	99	101	194	191	99	101
GIP2	147	116	129	109	34	26	14	21	2	2	54	54	54	54	54	54	54	54
GJB2	68	82	85	58	31	26	26	45	45	11	36	36	36	36	36	36	36	36
HAL	41	41	64	61	27	18	18	91	91	40	69	47	33	33	33	33	33	33
IF56	45	31	26	40	18	18	11	10	4	3	4	4	3	4	3	4	3	4
MX1	88	92	91	70	58	33	29	22	11	4	21	20	7	11	11	11	11	11
S100A12	17	9	18	9	4	61	19	12	2	2	9	10	10	10	10	10	10	10
TGM1	56	65	50	80	69	61	28	28	35	11	54	55	55	55	55	55	55	55
DPNGT7	50	93	22	15	35	27	90	27	38	38	17	18	18	9	7	7	7	7
SCCA7	25	48	36	35	28	90	27	38	38	10	17	384	352	259	259	259	259	259
S100A7	613	699	489	666	531	465	455	519	518	20	513	584	352	259	259	259	259	259
TGM1	46	63	51	26	31	20	19	20	20	20	20	22	24	6	11	11	11	11
ATP1A1	23	18	24	19	18	14	11	13	13	1	9	19	4	10	10	10	10	10
LAHIVD	11	11	14	12	6	11	11	11	11	1	17	17	17	17	11	11	11	11
SOX10	55	43	34	34	34	34	23	43	19	5	27	4	3	3	3	3	3	3
KCNQ3	17	7	9	10	5	14	7	8	4	2	4	4	3	3	3	3	3	3
SPRR1B	455	420	366	533	323	325	219	283	283	27	149	180	90	118	118	118	118	118
LGALS3BP	43	54	48	49	37	51	5	24	19	4	15	6	6	6	6	6	6	6
PP2A	20	18	21	18	18	21	2	2	2	2	4	6	6	6	6	6	6	6
C10A	17	11	10	30	11	11	18	18	2	2	6	9	9	9	9	9	9	9
PRSS6	84	100	106	98	98	87	62	87	49	17	81	49	23	39	39	39	39	39
S100A2	275	289	271	176	163	423	361	273	167	55	177	194	166	108	108	108	108	108
PLSCR1	14	12	14	24	6	6	2	2	2	2	2	2	2	2	2	2	2	2
KRT7	361	346	340	250	190	115	100	219	182	52	115	208	48	53	53	53	53	53
ID1	15	13	13	13	13	13	58	59	94	94	52	48	48	48	48	48	48	48
CRABP2	96	112	118	175	117	133	89	99	99	108	21	68	72	33	41	41	41	41
FABP5	151	185	207	296	147	206	155	199	191	97	172	154	129	121	121	121	121	121
RIB1	14	13	14	15	10	11	8	9	8	2	6	6	4	4	4	4	4	4
CSNK1A1	22	27	38	26	22	21	14	50	50	18	18	18	18	18	18	18	18	18
LEA	15	12	12	12	12	12	1	1	9	6	4	11	8	4	4	4	4	4
STAT1	43	30	44	37	16	23	49	42	42	18	9	31	23	18	22	22	22	22
TOP1	29	20	31	26	9	26	26	24	18	4	17	17	9	12	12	12	12	12
NP	33	35	35	36	23	49	26	35	34	24	9	24	18	2	10	10	10	10
GNA15	31	19	22	42	25	16	16	16	16	16	6	8	2	4	4	4	4	4
PCD	18	20	17	17	17	17	17	17	17	17	13	13	13	13	13	13	13	13
K25P (PERML1)	11	11	13	11	5	6	7	7	3	3	7	10	3	4	4	4	4	4
UBE2F1	15	9	7	11	5	1*	4	9	3	3	5	4	3	3	3	3	3	3
BENE	25	41	36	23	16	24	38	36	32	12	22	22	13	13	13	13	13	13
IRAK1	54	45	46	44	33	76	99	78	63	32	72	48	46	41	41	41	41	41
TSHZ3	125	116	118	133	68	31	29	30	28	7	20	18	6	9	9	9	9	9
ELP1	23	24	25	38	18	31	31	29	30	28	7	60	66	27	45	45	45	45
IF17SEP	188	189	182	300	163	118	76	78	78	133	23	26	26	26	26	26	26	26
PCSK4	25	37	36	26	11	23	46	34	34	31	33	33	33	33	33	33	33	33
K111_NUC34	41	46	46	59	25*	23	24	47	31	2	10	8	2	2	2	2	2	2
EIF5	15	14	16	15	9	12	12	13	9	3	17	21	4	9	9	9	9	9
TSSC3	40	15	38	37	14	31	18	23	11	6	17	21	4	9	9	9	9	9
LDLR	17	16	23	21	10	31	20	23	19	6	12	12	12	12	12	12	12	12
GOT2	17	28	29	22	16	37	22	30	19	6	23	18	6	9	9	9	9	9
GARS	43	56	60	55	35	30	30	30	30	30	65	45	44	38	38	38	38	38
PHB	13	16	13	13	11	13	1	14	7	2	9	10	3	4	4	4	4	4
E12B	27	42	32	49	27	52	27	39	35	8	26	20	14	13	13	13	13	13
RAB1	20	22	23	27	13	21	12	17	21	2	13	10	4	5	5	5	5	5
EFLF2	10	6	10	12	8	11	8	6	11	3	9	6	6	6	6	6	6	6
STAT3	13	16	19	21	11	24	24	30	16	16	12	11	6	4	4	4	4	4
PP2CA	17	10	10	10	6	10	13	15	9	4	19	7	6	6	6	6	6	6
OAS1	17	15	25	25	25	30	15	17	18	4	20	13	6	10	10	10	10	10
UBRECS	21	12	21	25	14	26	15	17	20	5	11	11	11	11	11	11	11	11
EIF2A	16	13	14	17	14	28	12	14	15	5	14	10	6	8	8	8	8	8
PSMB10	19	21	23	26	17	9	12	12	12	3	11	10	13	5	8	8	8	8

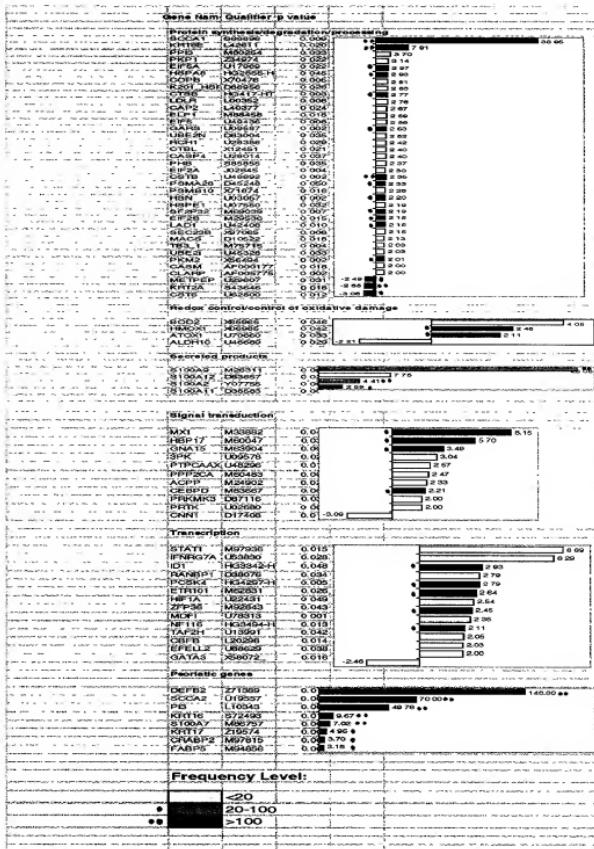
**FIGURE 2**

PRKMK3	19	14	13	9	7	16	7	8	12	4	8	6	4	0
GSTP1	165	195	170	268	131	271	167	156	190	26	124	87	48	36
S100A11	117	86	121	119	90	106	85	64	94	23	67	77	17	3*
S100A10	253	205	263	237	18	138	122	117	110	21	138	120	41	91
ATON1	48	34	31	61	48	57	26	42	52	21	22	16	14	11
CDC25	25	28	25	21	17	12	15	7	8	3	9	6	5	0
LAD1	91	57	54	58	56	72	41	51	38	17	48	31	20	24
P5CDC	15	15	16	16	16	24	11	14	15	5	8	8	4	0
PTEN	29	32	30	52	38	45	36	36	92	56	28	16	4	1*
PGAM1	111	84	101	121	53	143	143	106	92	56	103	100	97	5*
TB2_1	11	13	9	12	9	12	11	11	13	4	9	8	5	6
SCY44	8	6	11	5	5	7	8	7	2	4	5	7	3	4
E_23773	14	9	11	16	8	12	13	11	12	4	10	7	4	0
PTENP1	9	8	12	6	6	6	9	5	4	3	8	6	3	4
CASP	18	13	18	16	16	17	13	21	26	3	6	6	4	3
GPN2	28	27	30	30	25	39	24	26	19	15	13	13	11	3
E1F5A	18	18	25	9	6	20	32	35	13	4	3	4	2	3
CBR	29	19	23	42	21	17	26	22	17	10	20	13	10	9
COX5A	100	91	99	97	68	74	81	79	77	10	35	23	18	14
PSMB5C7	41	29	37	61	53	52	25	24	43	21	26	22	20	24
UOCF51	42	46	55	53	51	44	51	56	38	11	45	38	12	20
MSE5	13	7	11	15	12	26	12	12	19	4	9	8	4	6
CYB51	6	6	4	6	5	7	4	5	6	3	4	4	2	3
CDKN3	8	7	6	6	9	8	7	6	7	3	4	3	3	5
CDKN6B	9	7	6	7	7	9	4	9	5	3	4	4	3	5
SEC23B	9	6	8	8	7	9	4	9	5	3	4	4	3	3
MAGEP15	18	17	24	15	13	20	15	25	16	7	20	15	5	7
DLD	9	6	6	9	6	11	11	10	9	4	9	6	4	2
P4HB	96	82	89	115	65	46	53	74	49	18	49	49	36	38
PTEN	65	74	74	74	59	121	157	99	121	23	83	59	33	21
BTG3	15	24	24	19	20	18	22	20	20	3	25	15	8	11
ARF6	15	7	17	19	12	~	6	11	7	3	12	7	3	5
PYR10K	10	6	3	7	5	7	2	3	2	2	2	2	2	2
CDKN2A	28	14	16	16	17	9	10	14	14	14	10	8	3	1
CSNK1E	15	22	12	13	9	20	18	14	14	14	25	17	11	1
SOC1	18	14	14	19	19	3	20	20	43	18	20	6	9	14
TSK1	5	4	3	4	5	3	2	2	4	3	2	3	3	2
SPTAN1	6	5	4	8	6	4	4	4	4	4	4	4	3	2
METFEP	5	5	6	7	19	6	11	11	11	3	30	26	14	32
NAT2A	52	73	33	44	56	150	132	132	132	3	40	36	20	27
PTENP1	9	7	6	10	30	24	18	15	15	11	14	14	10	11
CST6	72	44	55	126	126	89	56	129	57	3	91	40	37	24
IGGF2BP	6	4	3	6	6	3	3	4	5	3	3	4	4	3

 genes that increase in gene expression greater than 2 fold when compared to uninvolved skin  
 genes that decrease in gene expression greater than 2 fold when compared to uninvolved skin

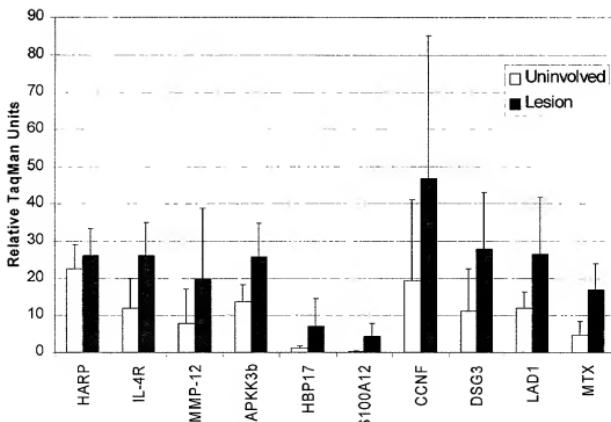
FIGURE 2 CONT.





**FIGURE 3 CONT.**

A



B

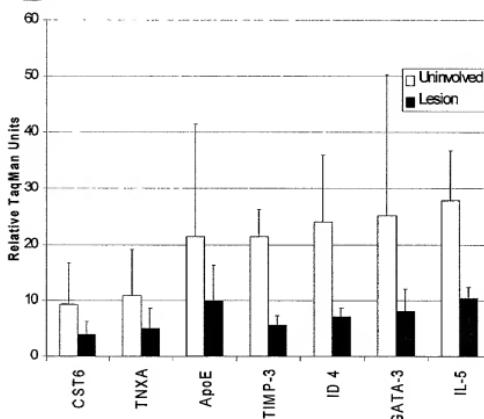
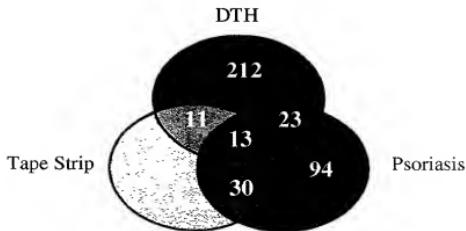


FIGURE 4

**A**

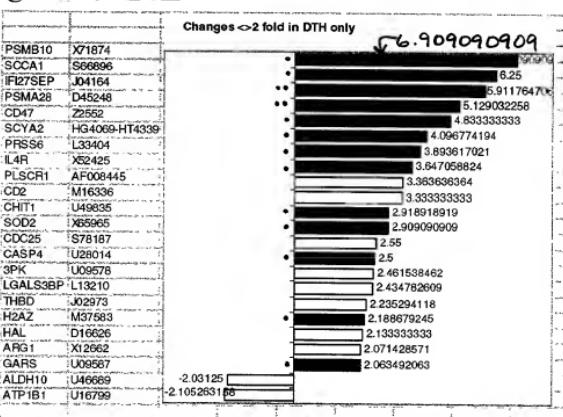


**B**

Changes >2 in both DTH & TS	
name	qualifer
S10040	M02611
	DTH
	TS
S0GA2	U19657
	DTH
	TS
P13	LT0343
	DTH
	TS
JOEFB2	ZF1369
	DTH
	TS
S10047	M86757
	DTH
	TS
KRTR16	S72493
	DTH
	TS
KRTR02	L42611
	DTH
	TS
SPHRIB1B	M19688
	DTH
	TS
S10042	Y07755
	DTH
	TS
GNNA15	M46904
	DTH
	TS
MX1	M33882
	DTH
	TS
SRFM	M54338
	DTH
	TS
ZFP30	M92843
	DTH
	TS
Frequency Level	
	<20
	20-100
	>100

**FIGURE 5**

C



D

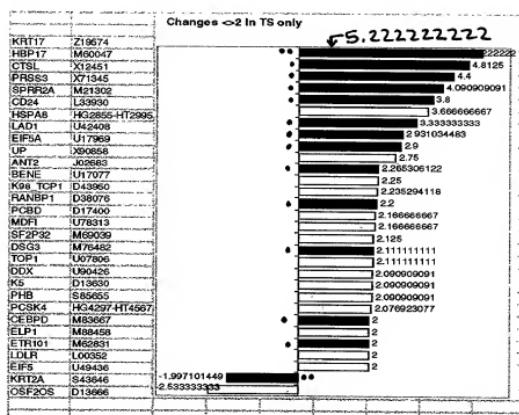
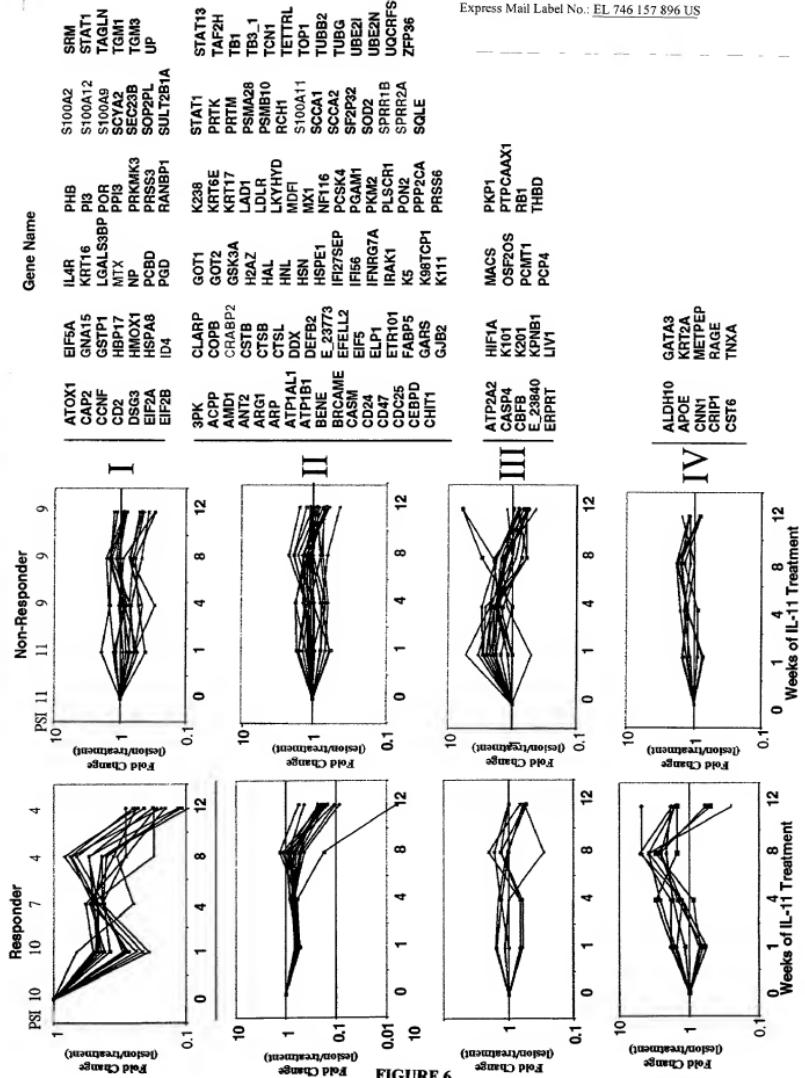


FIGURE 5 CONT.



## FIGURE 6

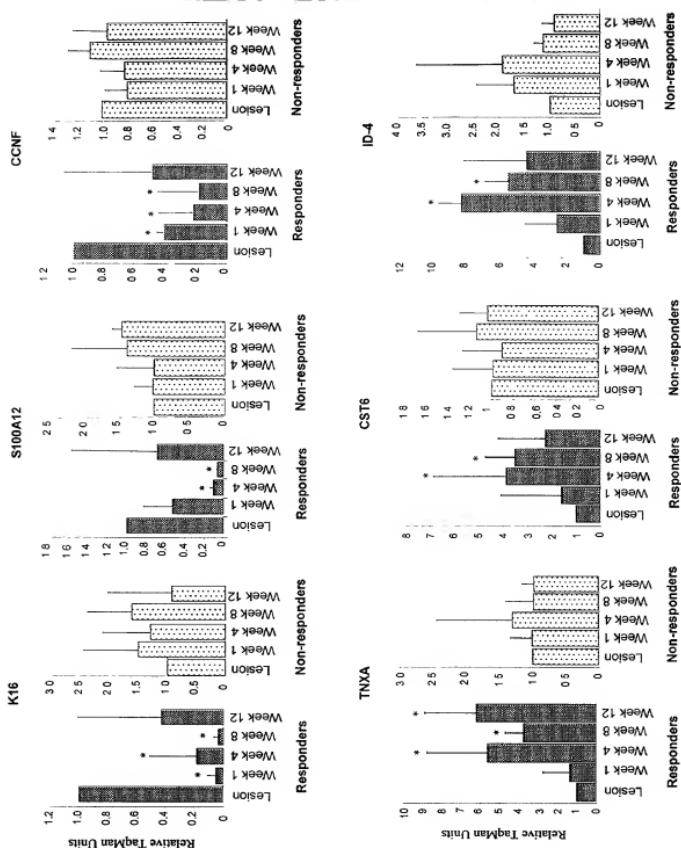


FIGURE 7